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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,585	07/07/2003	Michiaki Otani	9333/352	8983
74980	7590	09/05/2008		
ALPINE/BHGL P.O. Box 10395 Chicago, IL 60610			EXAMINER KNEPPER, DAVID D	
			ART UNIT	PAPER NUMBER
			2626	
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			09/05/2008 PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/615,585

**Applicant(s)**

OTANI, MICHIAKI

**Examiner**

David D. Knepper

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 April 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-18 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

1. Applicant's correspondence filed on 4 Apr 2008 has been received and considered. Claims 1-18 are pending.

### **Claims**

2. Claims 1-18 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim changes are not directed towards transliteration but are more broadly stated. The applicant points to paragraphs 7-11, 26 and 33 of the specification for support of the current amendment. However, paragraphs 7-11 on pages 1-2 of the specification contain language that mimics the previous claim language. Paragraph 26 on page 4 of the specification discusses "spelling translator 6 translates the spelling of the place name text item according to the rules described in the translation rule table 7 (step 304)..." which seems less relevant to the amendment because it reinforces the previous use of translation terminology and appears to contradict the suggested alternative language. Paragraph 33 on page 6 indicates that only French text is specifically taught for conversion into English using TTS (Text-to-Speech) but "appropriate translation rule tables" for other languages may be used. Therefore, the specification does not support different interpretations over the previous claim language other than taking into account that the current claim language is broader in scope.

Review of the specification indicates that terminology supporting the now broader claim terminology "converting" (as opposed to translating) finds support in the specification from the "spelling translator" of figure 4A, 4B, 4C and on page 5, paragraph 28. As is noted in the

previous interview summary, it appears that the applicant intends to direct the claims towards what is commonly known in the art as transliteration but did not use this term. Unfortunately, the applicant did instead use terms such as "translator" in the specification which may cause the claims to be interpreted in ways that are not intended. It would seem only reasonable that the broader claim language could be interpreted as translation or transliteration (and possibly in other reasonable interpretations).

This rejection is made to point out that even the examples given may be interpreted as supporting conversions which result in translations that are fairly taught by the prior art as originally applied. The applicant is on record indicating that transliteration is intended but the specification does not seem to support this terminology. The applicant has had plenty of time to make changes using such terminology, filing a CIP or other possibilities using arguments but nothing specific has overcome or clarified this problem.

3. Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for various translation conversions, does not reasonably provide enablement for transliteration conversions which is what the applicant intends to cover based on arguments and interviews of record. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to perform transliteration because the specification uses the terminology "translator" which does not support the invention commensurate in scope with these claims as intended by the applicant.

As noted above regarding 35 USC 112, second paragraph, the specification appears to support the original interpretation of claims better than it supports the interpretation desired by

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the applicant. It is considered improper to allow a specification to mature to a patent which would mislead or cause confusion in the art to which it most nearly pertains if the terminology within is, in itself, contradictory or would lead to the conclusion that it is performing spelling conversions in accordance with a variety of translation pronunciations when it is really performing transliteration to cause pronunciations in a different language using spellings that may not be possible (or are technically incorrect) in a particular language.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-6 and 11-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Renegar (6,024,571).

Applicant is referred to the rejection of 21 Sep 2007 in its entirety to include the Response to arguments which clarified terminology such as “translation” which is used extensively by the applicant and has a widely accepted and unambiguous meaning in the English language as pertains to converting from one language to another.

The applicant is also referred to the Interview Summary of 29 October 2007 which indicates that the discussion focused on the term “transliteration” which is not used by the applicant but is apparently what the applicant intended to claim. As is shown by the prior art, various forms of translation are well-known which render the claimed subject matter unpatentable. It is also noted that Renegar specifically teaches transliterations, col. 21, line 34;

col. 22, line 32; col. 27, line 27 which would read upon the claim language as desired by the applicant if interpreted as such.

The new claim term “means for automatically converting the spelling” (replacing ‘a spelling translator for automatically translating the spelling’) is, at best, a broader recitation which indicates that the claims could be interpreted as translation and/or some type of transliteration, both of which are taught by Renegar.

It is unclear whether it is possible for the applicant to claim transliteration using terminology that does not encompass or describe this concept. As the previous Office Action describes, the claim term “character or string” will inherently include not only one or more characters but also one or more words. That such terminology includes a host of different meanings is clearly expressed in the way various claims are rejected. See for example, claim 16, (page 6 of the 21 Sep 2007 Office Action) where the claimed text includes a host of database items to include streets, roads, destination, landmarks, etc.; column 13, lines 52-67. The only change in this regard is to limit “identifying a character” and then “replacing said identified character” ... “with a character or string”. It does not appear that single letter analysis is sufficient to overcome Renegar who teaches at the very least that there exist single letter words such as “a” in col. 14, line 47.

As was previously noted, various claims such as claim 16 require the invention to include concepts such as navigation which is not limited to particular text elements but include one or more words. Such concepts require one or more words with multiple meanings and appear to be very relevant to translation systems such as the prior art applied. Therefore, it would appear that the changes to the claims do not limit the claims to anything outside the scope of the prior art.

As noted above, Renegar also teaches the transliteration is known. Thus, even if the applicant were to add this term or some definition that one of ordinary skill in the art would readily identify as such (i.e. – to overcome possible confusion), this would not overcome the prior art.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7-10 are rejected under 35 U.S.C. § 103 as being unpatentable over Renegar in view of Conkie (6,173,263).

Applicant is referred to the rejection of 21 Sep 2007 in its entirety. Although the terms “translator, translating” has been removed, the term “converting” is considered broader and finds support in the specification from the old terminology as similarly argued above regarding the other claims.

Similar to the above discussion, the claimed “replacing the abbreviated original text item with a full text item” would require understanding or interpretation of the meaning of abbreviations and/or word description thereof. Thus, it would appear that the prior art which

performs translation of abbreviated text is clearly pertinent and that the claims do not overcome the prior art rejection.

### **Response to Arguments**

8. The above rejections include explanations in response to the arguments presented by the applicant on April 2008.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-6 and 11-18 are rejected under 35 U.S.C. § 103 as being unpatentable over Renegar (6,024,571) in view of Hetherington (6,389,386).

This combination of references is presented as an alternative to the rejection applying Renegar as a single reference 35 USC 102 as an alternative interpretation of “means for automatically converting the spelling of an original text item in the first language into a new text item...”



It is noted that the applicant does not use the term “transliteration” but argues that the intended meaning of the claim language would read upon this term. It is noted that Renegar also explicitly teaches this term. The applicant has not addressed this teaching but some details regarding the implementation of transliteration will be further addressed herein to further prosecution and preclude further delays in reaching a final result. Renegar teaches alternative spelling for different language combinations as previously noted, in particular, in column 39 but does not teach transliteration details. Hetherington teaches details in col. 7, line 67 for a transliteration engine 220 which Given an appropriate resource file 222, however, characters may be transliterated between any two languages for which characters in one language sound-map to one or more characters in the other. see col. 8, lines 44-49 and intervening information. It would have been obvious for a person having ordinary skill in the pertinent art, at the time the invention was made, to combine the transliteration of Hetherington with the language translation and transliteration of Renegar because Hetherington teaches that this use of transliteration will allow proper pronunciation between languages that do not have similar or the same characters (or alphabets).

As per claims 1 and 11, “automated voice generator” is taught by his Renegar’s sound replication of words, col. 40, line 6:

“means for automatically converting the spelling of an original text item in the first language into a new text item by:” (transliterations taught by Renegar in col. 27, lines 25-col. 28 where he discusses the similar or different sounds when words are converted from one language to another (i.e. – Spanish & English) and the letter-group spellings that transliterations may be

used to form spellings that may not be correct in terms of the desired language per se, but that will be properly pronounced);

“identifying a character in the original text item that is not included in the alphabet of the second language...

“replacing said identified character in the original text item with a character or string in the alphabet of the second language” (suggested by Renegar in col. 7, lines 5-15 where some letters that do not appear in English are shown in Spanish and are transliterated using a form of phonetic spelling using English characters – see also the more detailed explanation of Hetherington I col. 7, lines 38 - col. 10 where he uses the transliteration engine 220 and explains that languages which do not employ the latin character set or a character set which may be sound-mapped to the latin character set, data entry methods 210 input data ... which may be sound-mapped to the latin character set, col. 8, lines 41-58);

“means for generating voice by pronouncing the new text item according to the pronunciation of the second language” (taught by Renegar’s pronunciation system that comprises modified phonetic transliterations of Spanish equivalents, accompanied by displays of speech-sound production prompts, col. 5, lines 64-67 – see also Hetherington’s sound card and audio speakers, col. 3, line 53 which would explicitly provide sound output).

It is noted that Renegar does not teach certain programming and hardware necessary for transliteration support but teaches the terms that would be readily recognized by one of ordinary skill in the art to implement the desired character conversions for particular pronunciations. Hetherington clearly explains details that allow a wide variety of language transliterations using a particular character set to help someone properly pronounce words in a language different that

the character set used to describe the pronunciation. Hetherington also teaches details regarding computer programming and hardware capable of implementing such additional details. It would have been obvious to utilize the computer programming details taught by Hetherington in the system of Renegar because both patents are performing transliteration for similar purposes (i.e. – to help a user properly pronounce a translation). Furthermore, Renegar teaches that his system desires to improve the rapidly accessing words and phrases (col. 41, lines 10-45) and Hetherington explicitly teaches the use of automation using well-known computer systems (col. 3, lines 25-62) which one of ordinary skill in the art would recognize as systems that would further improve the speed and the ease of a user to rapidly process the desired words and phrases for which both patents teach combinations of translation and transliteration.

Claim 2: Renegar teaches “place name text items assigned to respective places” in col. 13, lines 52-67 where he mentions Destinations & Landmarks.

Claims 3 and 12, Renegar teaches “a place name text item representing a place name” as noted under claim 2 above. It is further noted that he mentions generic places such as “hotel”, “bank” and “market”.

Claims 4 and 13: Renegar teaches French and English in col. 39, lines 59-63.

Claims 5 and 14: Renegar teaches Spanish and English in col. 39, lines 59-63.

Claims 6 and 15: Renegar teaches German and English in col. 39, lines 59-63.

Claims 16 is rejected under similar arguments as applied to claims 1 and 11 above. In addition Renegar teaches a navigation apparatus for guiding users comprising:

“map database” (his navigating in areas, col. 13, lines 52-67);

“reading out the place name text item...” (his streets, roads, destinations, landmarks, etc., col. 13, lines 52-67);

“generating voice by pronouncing the new text item...” (col. 5, lines 64-67 – see also claim 1 in combination with Hetherington noted above).

Claim 17: Renegar teaches “replacement rules identified in a rule table” (col. 20, lines 37-46 and col. 21, line 59 – col. 22, line 4 that associates a character or string in the first language that is note included in the alphabet of the second language with a character or string in the alphabet of the second language having an equivalent or similar pronunciation (col. 22, lines 25-29; col 24, lines 1-6; col. 29, lines 1-9; col. 26 lines 30-50 and col. 27, lines 15-25 with col. 28, lines 46-50) and also in combination with the tables for sound mapping taught by Hetherington in col. 7-10 as noted in claim 1 above.

Claim 18: Renegar teaches conerting operates between any of a plurality of first languages and the second language as noted under claims 4-6 above and also (col. 22, lines 25-29; col. 24, lines 1-6; col. 29, lines 1-9; col 26, lines 30-50; col. 27, lines 15-25 and col. 28, lines 46-50).

11. Claims 7-10 are rejected under 35 U.S.C. § 103 as being unpatentable over Renegar in view of Hetherington as applied against claims 1-6 and 11-18 and further in view of Conkie (6,173,263).

Claim 7 is rejected under similar arguments as noted for claims 1 and 11 above but does not specifically teach abbreviated text. However, Conkie teaches that it is well known to translate abbreviated text in col. 4, lines 31-57 in order to determine the syntactic structure of the sentence so that it can be spoken with the proper intonation. Therefore, it would have been

obvious to one of ordinary skill in the art to modify Rencgar's system to translate abbreviated text as taught by Conkie in order to properly distinguish sentence boundaries and to expand abbreviations into pronounceable forms as taught by Conkie (col. 4, lines 31-57). It is also noted that Conkie teaches the use of computers similar to that of Hetherington indicating that the combination of computer hardware and software of Hetherington is easily supported.

12. Some correspondence may be submitted electronically. See the Office's Internet Web site <http://www.uspto.gov> for additional information.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Knepper whose telephone number is (571) 272-7607. The examiner can normally be reached on Monday-Friday from 9:00 a.m.-6:30 p.m., second

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Friday off with 2<sup>nd</sup> Thursday hours of 8:00 a.m.-4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth, can be reached on (571) 272-7843.

For the Group 2600 receptionist or customer service call (571) 272-2600.

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/David D. Knepper/  
Primary Examiner  
**Art Unit 2626**